

The 1-2-3s of BSR (BERNINA[®] Stitch Regulator)

Freedom Stitching

Free-motion sewing techniques are not new. In fact, they have been around almost as long as the sewing machine itself. Someone figured out that if you could disengage or drop or cover the feed dog of the machine, the movement of the fabric could totally be controlled by the sewer! Sew any design, any direction, any time! This opened up a world of decorative possibilities: thread painting, intricate quilting, sashiko, trapunto, bobbinwork, and more. The good news was that almost anything one could imagine could be stitched; the bad news was that it took a certain skill level, developed by hours of practice, to successfully transfer ideas from one's imagination to fabric.

Over the years, sewing machines have become more and more automatic with preprogrammed stitch settings, digitized designs, and one-touch use. But still the desire to imagine and create—letting ideas flow from the mind's eye directly to the fabric—persists. With the new BERNINA[®] Stitch Regulator, you can easily give wings to your creativity without long hours of practice to perfect your free-motion stitching. It's as easy as 1-2-3:

- 1—Ready: Decide which free-motion technique to try.
- 2—Set: Get your machine and supplies ready.
- 3—GO: Sit down and stitch your imagination!

1—Ready—Decide which free-motion technique to try.

From quilting to thread painting to sashiko, there are a wide variety of effects that can be sewn with the feed dog of the sewing machine down. Even though the final results may look very different, most free-motion techniques are stitched in a similar manner. If you become comfortable with one, you can easily transfer those skills to another technique

2—Set—Get your machine and supplies ready.

Free-motion Presser Feet—No matter which foot you use when free-motion stitching, the basics of the technique remain the same. You have the freedom to create and place stitches exactly where you want! BERNINA[®] has several free-motion presser feet that work well for free-motion work. They are specially designed to work with the hopper mechanism of BERNINA[®] machines to ensure that the fabric does not travel up the needle (called “flagging”), thus causing distorted stitches. Try them all and select your favorite from Darning Foot #9, Embroidery Foot #15, Freehand Embroidery Foot #24, Embroidery Foot #26, and Freehand Quilting Feet #29/29C. When using any of these feet, the stitch length and the consistency and regularity of the stitching is determined by how smoothly, evenly, quickly or slowly you move the fabric.



BSR Presser Foot—The new BERNINA® Stitch Regulator (BSR) is another option for free-motion stitching. This unique foot, available for several BERNINA® models, makes you a confident free-motion stitcher even if you've never tried before! The BSR adjusts needle movement to coordinate with fabric movement. With two sewing modes, the BSR offers regulated, even stitches, no matter the speed or direction in which the fabric is moved.

The BSR operates with a camera-like sensor that reads the fabric through an optical lens in the foot. The sensor “looks” at the fabric, senses the movement, and calculates the distance. It then directs the needle to stitch according to the selected stitch settings. For example, if the stitch length is set at 2.5mm, the sensor calculates the distance and stitch frequency needed to repeat stitches with regular precision regardless of the speed at which the fabric is moved.

The BSR foot has three interchangeable soles for all types of free-motion work. The closed metal sole is similar to Darning Foot #9 with the needle centered and visible; the open metal sole is similar to Freehand Embroidery Foot #24, with an unobstructed view of the needle; and the large transparent sole glides easily over fabric, including bulky quilts (where the large diameter of the clear sole compresses the batting, allowing easy foot movement and needle visibility) and provides full visibility of the stitching area. Experiment with each sole, determining which you prefer for each technique and combination of materials you try – stitching through different types of quilt batting and fabrics, working with various thread weights, and sewing techniques such as sashiko, trapunto, bobbinwork, etc.

BSR Machine Settings—Thread the machine with the desired thread in the needle and bobbin and attach the BSR foot – don't forget to plug it in! Lower the feed dog and set the machine for straight stitch. Select the desired stitch length to “tell” the BSR how long you want your stitches to be.

Select BSR Mode 1 or Mode 2, depending upon your preference. Mode 1 has constant needle movement; even when the fabric stops moving, the needle continues to move up and down very slowly; this mode gives the sewer time to stop and think about the path the needle is taking. With Mode 2, stitches are taken only when the fabric is in motion; when the fabric stops moving the needle comes to a complete stop, starting again only when the fabric is moved. Try each mode with various techniques (quilting, sashiko, trapunto, silk-ribbon embroidery, bobbinwork, etc.) to determine your favorite in each situation.

Marking Your Fabric—Free-motion designs can be stitched with or without a design to follow. Stipple stitching and “doodling” are often used to fill an area and are done without following drawn lines. Other designs such as feathers, wreaths, clamshells, and other traditional quilting designs can be transferred to the fabric using your favorite method: water- or air-soluble fabric marker, fabric chalk pencil or marker, or a pounce pad.

Advice for beginners: For your first practice piece you may want to mark a design on the fabric. Start with a loose, open design that is not too intricate; there will be time for that once you get the feel of maneuvering the fabric.



Free-motion Feet #9, #24, and #29



BERNINA Stitch Regulator Foot with Interchangeable Soles

Preparing A Practice Piece—Prepare a practice piece, about 18" x 18". This should be appropriate for the technique you are practicing. For example, free-motion quilting uses a “sandwich” of two layers of fabric with batting between them. For free-motion sashiko, use lightweight interfaced denim with tear-away stabilizer, and for free-motion bobbinwork, use a medium weight firmly woven fabric such as cotton, linen, or lightweight wool.

Some techniques – including bobbinwork and thread painting – are worked in a hoop to hold the fabric smooth and taut. The fabric is hooped with the fabric *under* the inner hoop, exactly opposite as for hand embroidery. Free-motion machine quilting is usually stitched without a hoop as the bulk of the layers provide enough stability that the quilt doesn't require hooping.

3—GO—Sit down and stitch your imagination!

Starting To Stitch—Place the practice piece under the presser foot. Lower the foot; even though it doesn't touch the fabric, it must be lowered to engage the needle thread tension. Sew one stitch, stopping with the needle up. Tug gently on the needle thread to bring up a loop of bobbin thread; pull bobbin thread to the top of the work. Holding the thread tails behind the foot, take a few stitches in nearly – but not quite – the same place to secure the stitching. Stop and clip the thread tails.

Before continuing, set a timer for 15 minutes and make sure you won't be disturbed. This will help you keep track of how long you have been practicing. You'll want to stop and rest every few minutes, especially if you are new to this technique. You may be tensing your shoulders without realizing it; just remember to breathe and relax. Before long, you will be a master at free-motion stitching with the BERNINA® Stitch Regulator.

Place your hands on either side of the hoop or, if not using a hoop, on either side of the needle area to serve as a “hoop”. Begin stitching, running the machine at a moderate speed while moving your hands in a smooth, controlled manner. Practice making simple, repetitive shapes until you are comfortable, confident, and in control of the fabric. There are two methods of starting the machine: foot control and the Stat/Stop Slide on the front of some models. Try both to see which is best for you.

As you stitch, try writing your name and remembering how you learned to write. Keep your focus on where your hand is going rather than what it is doing right now. And, just like learning to write, free-motion stitching will soon become second nature and you'll be able to guide your fabric without over thinking it.



BSR compatible models (top to bottom): **aurora 440 QE**, **artista 630**, **artista 640**, and **artista 730**. Note: **artista 200** is BSR compatible when equipped with the Upgrade Kit.